## INTERNATIONAL SEARCH REPORT

plication No PCT/EP2004/011476

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H02K21/24 H02K1/14

H02K29/08

H02K3/52

H02K11/04

According to International Patent Classification (IPC) or to both national classification and IPC

## **B. FIELDS SEARCHED**

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{H02K} \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Etectronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

	ENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the	Relevant to claim No.				
(	US 2002/149285 A1 (TSO-KUO YIN 17 October 2002 (2002-10-17)	ET AL)	1-3,9			
1	paragraphs '0027! - '0034!; fi	6,7				
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 05, 3 May 2002 (2002-05-03) -& JP 2002 027722 A (MATSUSHITA ELECTRIC IND CO LTD), 25 January 2002 (2002-01-25) abstract; figures 2-4					
Y	US 5 808 390 A (ITO NORIO ET	AL)	6,7			
A	15 September 1998 (1998-09-15) column 14, line 13 - line 51; 2,8,32	figures	8			
		-/				
χ Furt	ther documents are listed in the continuation of box C.	X Patent family members are listed	In annex.			
<u> </u>	ther documents are listed in the continuation of box C.					
Special ca 'A' docum consid	ategories of cited documents:  ent defining the general state of the art which is not dered to be of particular relevance	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention	ernational filing date In the application but leory underlying the			
"A" docum consid "E" earlier filling o	ategories of cited documents :  ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention "X" document of particular relevance; the cannot be considered novel or cannot b	ernational filing date the application but leory underlying the claimed invention t be considered to			
"A" documiconside" "E" earlier filing of "L" documic which citatio	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another or other special reason (as specified)	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention.  "X" document of particular relevance; the cannot be considered novel or cannot inventive step when the divided the cannot be considered to involve an inventive step when the divided to involve an inventive step when the divided to involve an inventive step when the cannot be considered to involve an inventive step when the divided to involve an invention of particular relevance; the cannot be considered to involve an invention of particular relevance; the cannot be considered to involve an invention of particular relevance; the cannot be considered to involve an invention of particular relevance; the cannot be considered to involve an invention of particular relevance.	ernational filing date the application but leory underlying the claimed invention t be considered to comment is taken alone claimed invention livention livention			
"A" docum- consider filing of the documer which citation other	ategories of cited documents:  ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified)  ent referring to an oral disclosure, use, exhibition or means	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention  "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the d "Y" document of particular relevance; the	ernational filing date the application but leory underlying the claimed invention t be considered to locument is taken alone claimed invention liventive step when the lore other such docu-			
Special care consider a consider	ategories of cited documents:  ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention.  "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the discussion of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvious in the art.  "&" document member of the same patents.	ernational filing date the application but leory underlying the claimed invention t be considered to ocument is taken alone claimed invention liventive step when the ore other such docu- ous to a person skilled			
Special care consider a consider	ent defining the general state of the art which is not detered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another in or other special reason (as specified) enterering to an oral disclosure, use, exhibition or means ent published prior to the international filing date but	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention to the cannot be considered novel or cannot involve an inventive step when the document of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvious in the art.	ernational filing date the application but leory underlying the claimed invention t be considered to ocument is taken alone claimed invention liventive step when the ore other such docu- leus to a person skilled			
"A" documer consider the documer which citation other documer later to the documer between the documer bet	ategories of cited documents:  ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention.  "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the discussion of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvious in the art.  "&" document member of the same patents.	ernational filing date the application but leory underlying the claimed invention t be considered to ocument is taken alone claimed invention liventive step when the ore other such docu- leus to a person skilled			
Special care of the country of the care of	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another in or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or the invention.  "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the divided of the cannot be considered to involve an indocument is combined with one or ments, such combination being obvious in the art.  "&" document member of the same pater.	ernational filing date the application but leory underlying the claimed invention t be considered to ocument is taken alone claimed invention liventive step when the ore other such docu- leus to a person skilled			

## INTERNATIONAL SEARCH REPORT

Intel pplication No
PCT/EP2004/011476

S.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
2-4-		Todayan A. J. Car A.
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 43 06 327 A (PAPST MOTOREN GMBH & CO KG) 8 September 1994 (1994-09-08) abstract column 7, line 6 - line 10; claim 7	1
A	column 7, line 6 - line 10; claim 7  US 6 509 666 B1 (HUANG WEN-SHI ET AL) 21 January 2003 (2003-01-21) abstract; figures 3-7 column 3, line 33 - column 4, line 23	1,2,5
	l	

## INTERNATIONAL SEARCH REPORT

imormation on patent family members

Inte: upplication No PCT/EP2004/011476

Patent document cited in search report	ļ	Publication date		Patent family member(s)		Publication date
US 2002149285	A1	17-10-2002	NONE			
JP 2002027722	Α	25-01-2002	NONE	———————————————————————————————————————		
US 5808390	Α	15-09-1998	DE EP JP US	69233394 0613229 3146492 6166470	A1 B2	09-09-2004 31-08-1994 19-03-2001 26-12-2000
DE 4306327	Α	08-09-1994	DE	4306327	A1	08-09-1994
US 6509666	B1	21-01-2003	DE DE JP JP JP US US	10049107 10161013 3579642 2002051517 2002204559 2002190602 2002047474	A1 B2 A A	25-07-2002 18-07-2002 20-10-2004 15-02-2002 19-07-2002 19-12-2002 25-04-2002